California GARDEN

JULY-AUGUST 1972

50 cents

Floral Events... to enjoy

TOUR

July 8 : The San Diego Floral Association will conduct a tour to the South Coast Botanic Garden on the Palos Verdes Peninsula, with a visit to their annual flower show, a stop to see beautiful Mission San Juan Capistrano, and another stop for a bit of shopping at Laguna Beach. The bus will depart from behind the Organ Pavilion in Balboa Park at 8:30 AM and from the La Jolla Library at 9 AM. The fee for the tour is $ 6.50. For details and reservations please phone the Floral Association at 232-5762.

FLOWER SHOWS

June 27 to July 9 : The Southern California Exposition is open at Del Mar. It features one of the world's largest and most lavish flower shows, plus spectacular nursery exhibits and demonstration gardens.

July 1, 2, 3, & 4 : The Cactus and Succulent Society of America presents its annual show at the Los Angeles State and County Arboretum, 301 North Baldwin Ave, Arcadia. Hours 9 AM to 5 PM. Admission free.

July 7, 8, & 9 : The South Coast Botanic Garden at 26701 Rolling Hills Road on the Palos Verdes Peninsula presents its annual Flower Show. Open to 6 PM Friday and Saturday; to 5 PM on Sunday. Admission free.

July 14 thru 22 : Annual Santa Barbara National Flower Show at Earl Warren Showgrounds, Los Positas Road and Highway 101, Santa Barbara. Open to 10 PM each evening. Admission fee is 75 cents for adults.

July 15 : The Ventura branch of the National Fuchsia Society presents a fuchsia show at 250 South Mills Road in Ventura. Hours 10 AM to 6:30 PM. Admission is free. Fuchsia plants on sale at bargain prices.

July 15 & 16 : Annual Ventura Begonia Show will be staged in the cafeteria of the Cabrillo school at 1427 East Santa Clara Street, Ventura. Hours 11 AM to 6 PM. Admission free. And a begonia plant sale.

July 16 ; The Convair Garden Club wil stage the Convair Dahlia Show in the main exhibition room of the Casa Del Prado, Balboa Park, San Diego. Hours 1 PM to 5 PM. Admission free. No plants will be sold.

July 23 : The San Diego County Dahlia Society will stage its annual "Dahlia Specimen Show" in room 101 of the Casa Del Prado in San Diego. Open to the public from 1 PM to 5 PM. Free admission. No plants.

July 29 & 30 : The largest collection of specimen ferns ever assembled will be displayed at the Los Angeles International Fern Society's show at the Morrison Horticultural Center near the Rose Bowl, Pasadena.

July 29 & 30 : The Southern California Dahlia Society will present its annual show at Simms Park Auditorium, 16614 South Clark Ave, Bellflower. Saturday afternoon & evening. Sunday afternoon. Admission free.

August 5 & 6 : The San Diego County Dahlia Society will stage a show in the main exhibition hall of the Casa Del Prado in Balboa Park. 2 PM to 8 PM Saturday & 10 AM to 6 PM Sunday. Admission fee 50 cents.

September 2 & 3 : American Begonia Society show at Glendale College, 1500 North Verdugo Road, Glendale. Doors open 10 AM to 6 PM. Admission is free. Competitive entries by clubs & individuals. Plant sale.

FLORAL MEETINGS

July 30 : The San Diego Fuchsia Society invites the public to an open house in Room 101 of the Casa Del Prado in Balboa Park from 11 AM to 5:30 PM. Specimen plants will be on display. Hospitality & refreshments.

August 26 & 27 : The San Diego Rose Society invites the public to an open house in the main exhibit hall of the Casa Del Prado, Balboa Park, San Diego. There will be specimen blooms and displays, plus hospitality.

CALIFORNIA GARDEN

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VOLUME 63 NUMBER 4

THE COVER

It has been our pleasure to meet Sally Bancroft who had done illustrations for CALIFORNIA GARDEN during the 50's. She has provided us with the covers for this issue. We hope she is with us to stay.

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FUCHSIAS at the EXPO

ANNABELLE R. STUBBS

CHECKER BOARD

HAVE YOU EVER THOUGHT of the Del Mar Fair and Exposition without the flower show? Or, this particular show without fuchsias? Not consciously perhaps, so in your trip through the flower show this year notice these lovely plants in exhibits other than the regular fuchsia exhibits. You will find them in the patio exhibits, garden exhibits, hanging baskets, shade gardens—throughout the area. The fuchsia is just coming into full bloom at this time and is so versatile that it lends itself to almost any treatment, sun or shade, bush, standard, pillar, espallier, fan trellis, hanging basket, pot, bonsai, hedge, or even a ground cover. Our love affair with fuchsias started at the Del Mar Fair when we first met "Strawberry Sundae". Unfortunately we have never been particularly successful with this particular fuchsia, but we remember it fondly.

The fair gives fuchsia exhibitors a stimulus to show the new varieties, as points are given for late introductions. This gives the viewer a chance to evaluate new introductions and decide if one of them is a "must" for his garden. Along this line, be sure to take note paper and a pencil with you. You are sure to see something new that appeals to you, and if you do not write down the name you may forget it.

One thing to be aware of is that with a brand new introduction it may be necessary to wait a while until it is available. Instant hits, such as CAPRICORN or PINK MARSHMALLOW, may be sold out immediately. If your choice is sold out, do not be discouraged. The growers will be starting as many as they can, and it will eventually be in good supply. Some of the newer ones to watch for this year are: CAPRICORN, GRAND PRIX, WYANDOTT, BONITA, MISS LEUCADIA, PINK MARSHMALLOW, TOM H. OLIVER, CHRISTMAS ELF, NOVATO, HULA GIRL and many others.

Some of the exhibitors will be showing species and antiques. For example, did you know that GYPSY QUEEN is over 100 years old? It was introduced in 1865! It is still carried in some nurseries. There will also be varigated foliage fuchsias such as GOLDEN MARINKA and SUNRAY. These make a very different accent in your garden. The late introduction SANTA CLARA is one that is startling in its vivid contrast of bright yellow-green foliage with large deep purple blooms. Then there are the fuchsias with very dark foliage: SOUVENIER DE HENRI HEINKLE, LEVERKUSEN and GARTENMEISTER BONSTEDT. These will usually take full sun and quite a lot of heat.

You will see fuchsias grown in different ways, such as very small trees in pots, suitable for a patio or balcony table. These can be exquisite little conversation pieces. They are also fascinating subjects with which to work. They may be designed to fit into almost any space. The main requirement is to choose a type with small leaves and flowers.

Introductions from other countries are occasionally imported and often become popular here. One from England which we like is called TOLLING BELL. The form is a little like our own extremely popular MISSION BELL, but the color is red and white. The sepals are bright red, and the corolla is white with red veining. It seems to be an upright that can be made into a basket—with training.

Once again—be sure to bring your notebook and pencil! See you at the Expo!

The above photo illustrates the different types and uses of fuchsias; it was taken of the Stubbs Expo 1957 display.

FUCHSIAS, FUCHSIAS, FUCHSIAS

FUCHSIAS ARE California favorites. There are many reasons for the extreme popularity of this flowering shrub: its blooms are prolific and extremely attractive in their colorful, pendant forms; it will respond to the slightest bit of attention and it has a long, long blooming season.

Plus, the fuchsias can be used in a variety of planting styles throughout the garden and patio area. The shrub-types are excellent choices for the landscape. Hanging basket fuchsias spill their beauty from on high, creating an extraordinary accent wherever they are displayed. Espaliered against a wall or fence, the fuchsia makes a fine background to set off bedding plants or low-growing shrubs.

While the fuchsia prefers coolness, humidity, and shade, this does not mean it cannot be grown in the interior valleys, says the California Association of Nurserymen. By creating special situations of part shade, early morning or late afternoon sun, and little or no drying wind, successful results can be expected.

Assuring successful results will be enhanced if the fuchsia's moisture needs are attended to each day. Check for moisture content of soil; provide overhead waterings to furnish the necessary humidity in the early morning or late evening.

Watering is probably the most important aspect of growing fuchsias. Keep the soil moist around the plants—not muddy—from spring to fall. Under extremely hot conditions, this may require watering every day. Your nurseryman can recommend a regular program for you to follow on watering and feeding. A gluttonous plant, the fuchsia should not be overfed even though they seem to respond to each feeding. During the blooming season a monthly feeding may be sufficient; let your nurseryman's advice, based on local conditions, guide you to successful and enjoyable results.

Few diseases bother the fuchsia. Insects that may bother it can usually be prevented by hosing off the foliage each week. When spraying is necessary, there are safe, easy-to-use plant protection chemicals that will provide quick control.

A FLOWER LOST

Ellen G. Allen
Founder, Ikebana International

THE WORLD OF flower arrangers has lost one of its most talented and devoted enthusiasts, Ellen Gordon Allen, who founded Ikebana International and who did so much to promote an interest in and appreciation of flower arranging. She was a dedicated teacher of ikebana, as well as an author of several books on the subject. Mrs. Allen died on June 9, in Washington, D. C., just one month after attending the Sixth North American Regional Conference of Ikebana International in San Francisco.

It was during the time her husband, General Frank A. Allen, Jr., was stationed in Tokyo, Japan that she conceived the idea of establishing a world-wide organization which would stimulate and spread the study of Japanese flower arranging as an art, and above all, stimulate friendship and the spread of good will throughout the world among those with a mutual love for flowers and the art of ikebana.

On August 17, 1956, Ikebana International was born. It now has matured to over 160 chapters throughout the world with more than 10,000 members. The active San Diego Chapter, which is an affiliate of the San Diego Floral Association, is No. 119 and is proudly celebrating its Fifth Anniversary this year.

On the day of the International organization's founding, Mrs. Allen stated, "I see no reason why ikebana cannot become a veritable garland of flowers surrounding the world with beauty, binding all of us together in real and lasting friendship. Let us live these ideals through ikebana and the arts we love and enjoy so much, as well as live the spirit of Ikebana International's 'Friendship through Flowers' motto."

Mrs. Allen devoted the last sixteen years of her life to continued guidance and promotion of Ikebana International. In spite of failing health, during the past year she organized and directed the Sustaining Membership Program for Tokyo Headquarters. It is in memory of Mrs. Allen and her final efforts in behalf of her beloved organization that the San Diego Chapter No. 119 has presented a Sustaining Membership to the San Diego Floral Association, which will receive copies of publications for its library from Tokyo Headquarters. These publications will include the outstanding Ikebana International Magazine.

Even though she is a beloved flower lost, Mrs. Allen's indomitable spirit will continue to guide Ikebana International, its chapters and its members in the paths of 'Friendship through Flowers.'

Helen E. Ard

Helen E. Ard (Mrs. James H.)
President, San Diego Chapter #119
Ikebana International

Ikebana Editor
California Garden Magazine

HAZEL ARNOLD

HAVE YOU EVER sat and watched the pattern that leaves make when the sun is fashioning a shadow with them, or when a light in the room casts a shadow from a floral arrangement? I have a friend who is so fascinated by these patterns that she lights candles at dusk and places them around an arrangement so that the shadows make lovely patterns on the wall and/or ceiling. It is so restful to watch as the flames flicker and cause the shadows to dance. If one is entertaining, this effect is also a great conversation item as the guests are arriving. Such patterns remind me of looking up at the stars and imagining pictures in the sky, or watching the clouds as they constantly change and take on new forms.

Have you planted a tree lately and watched for each new leaf to appear? If it is a bare root tree, one might almost give up in despair before that little touch of new growth appears. According to my dictionary there are twenty-five forms of leaves. Just imagine all of the designs one can create using one or a combination of these forms.

Leaves have always played a more important part in Japanese flower arrangements than in Western style arrangements. In almost all ikebana, the art of Japanese flower arrangement, one will find a leaf or leaves. These can be cut to make new designs, or be made smaller, or be used on just one side. Leaves can also be bent, angled, stripped, split, shredded, looped or wired into new forms. Masterpieces can be made entirely of lotus, maple, iris, aspidistra, narcissus or others. Some will last for weeks.

It is often necessary to groom a branch that is to be used in an arrangement. However, one must be careful when removing the individual leaves. Too many leaves give an arrangement a "busy" look which spoils the beauty of line one tries to achieve in ikebana. Too many leaves removed can give that "bare stick" look. It takes time and experience to be able to remove just the right ones in order to achieve a finished "clean line" look.

Leaves are beautiful in the early spring when they are just beginning to form on the branch. Many types of arrangements may be created with this material. Leaves are also lovely when mature, but that is the time the branches must be carefully pruned in order to show the "clean line." Often most of the leaves from the bottom or lower side of the branch are removed and some off the top or upper side are removed to give a beautiful line and an airy appearance to the branch.

In the fall when leaves begin to change from green to yellow, orange, red or bronze, they are interesting and exciting. There is no need for their beauty to be lost, because they can be preserved in many ways. They can be bleached, skeletonized, carefully dried or treated in a composition of 1/3 glycerine and 2/3 water for ten days to six weeks. The latter treatment results in quite pliable—not brittle—material. They may also be wired into a desired shape, or spray painted any color.

Leaves are also important to us as living organisms. As we exhale carbon dioxide, plants take it in retaining the carbon for food material and giving off oxygen. And, how about the wonderful leaf mulch? As they start to decay, they can be dug into the soil around the plants enriching the soil and holding moisture around the roots.

Yes, leaves are useful to us in many ways, but we should not overlook their artistic beauty. If you do not have flowers for arrangements, try making one out of leaves.

ALFRED D. ROBINSON, DREAMER and DOER

In August, Mr. and Mrs. Donald Hunter have invited the Alfred D. Robinson Branch of the American Begonia Society to celebrate its Thirtieth Anniversary at its birthplace—the Rosecroft Begonia Gardens on Point Loma in the original lath house of the man whose name was synonomous with begonias. He was the chief founder of the San Diego Floral Association as well as the originator and editor of CALIFORNIA GARDEN, then a monthly, for over seventeen years. He continued to write on "Lath House Matters" and "The Early Bird" until 1931. His last article in the 1939 Thirtieth Anniversary edition told how the SDFA was started. Because it was my privilege to know Mr. Robinson, I have been asked to recall some of the many facets of his remarkable personality along with quotations from his writings that began in 1909.

Alice McClurkin

BECAUSE OF HIS ENGLISH BACKGROUND Alfred D. Robinson's thoughts and feelings generally found expression in the gardening process. The San Diego Floral Association was almost a part of him, and CALIFORNIA GARDEN was his voice. The man himself was not that easy to pinpoint; his quiver was full of arrows that found all kinds of marks.

He aimed at art in many forms. A rose carved in wood gave his home the name of Rosecroft. Rich patterns in oriental rugs graced its floors. Living colors in peacocks and pheasants paraded through the grounds while a caged parrot enlivened indoors with its gaudy tints and often colorful remarks. He made plant pictures. The roses that graced his front entrance were his first love. (He always hoped someone would name one for him.) His later enthusiasm for dahlias found its outlet in a gorgeous array in the back lot. In the spring, a wisteria cascade took over the lath house followed by inflorescent displays of tuberous begonias rioting against stone backgrounds and tumbling from the baskets overhead. Mr. Robinson featured unusual trees, lining his drive with red-flowering eucalyptus when they were rare. The first Fern Pine, *Podocarpus elongata,* which Kate Sessions obtained for him, still thrives in Rosecroft Gardens.

As a booster of San Diego, A.D.R. exhorted local people to take advantage of its fine climate by beautifying their outdoor living areas. In 1926, he wrote: "I think gardening is an art allied to living. It should not at any stage induce tension, either in the gardener or the gardening. All results should suggest relaxation rather than strain and the keynote should be comfort—for both man and plant.... Naturally I advocate the building of a lath house which is fast developing from a mere lath protection for plants to a summer outdoor living room." Those were novel words twenty-five years ago. He prompted the Floral Association to put on two flower shows in 1907 that were both beautiful and educational. Thereafter, two were held each year until many special garden clubs took over.

Alfred Robinson was a nature lover, and there are many touching reports of his visits to our back country. He was an ecologist before we used the term. Sixty years ago he bewailed the straight streets that cut through rather than around our gentle hills. Leafmold and manures were the gold over which he drooled.

A scientific interest usually pointed the Robinson arrows. He kept a daily record of rainfall and temperatures at Rosecroft in order to gage why and when plants did their best. He thumbed all available literature for the backgrounds of his world-renowned begonia hybrids. This same urge caused him to raise pedigreed barred-rock chickens that won top awards across the country. (He had an ingenious little frame rigged up to hold his cocks while he polished their spurs for a show.) To promote the sale of his "birds" as he called them, he paid for ads in CALIFORNIA GARDEN, listed under "Robinson's Corner." I quote from the one of September 1914:

"We thought we had solved the difficulty of naming our chickens when we plunged into mythology with Cassandra. But already we have Helenus, the twin brother, and, too late, found that the original lady was never married, so her husband is called Jupiter who courted her unsuccessfully in the story.

"Gasping for a long genealogy that would sound in the dim past, a light broke, a revelation, and we flew to the family Bible, and in Genesis X, we read the family tree of Noah. It contains lovely original names of one syllable such as Shem, Ham, Cush, Phut, etc., and the branches are many and satisfying. Only one difference appears—the ladies' names are not given. Evidently men wrote that chapter. However, Noah has been christened..." No women's Lib??!!

Not a large man, Mr. R. worked hard physically as well as mentally at whatever he thought was worth the target. Here is part of an editorial of December 1927.

"I want to tell you about that glasshouse that was in the shaping when I last wrote. It is up and ready to be filled, and my head is too big to go through the wide entrance. I built it with the splendid aid of my general-utility man. We piled up the hardpan rocks against boards and packed in cement as we went along.

"You know of that chap, Balbus, who built a wall in the Latin exercise book of long ago. I remember how I suffered trying to build his wall, in Latin. I thought, 'Why make such a fuss about the job,' but now I know that Balbus was not building A wall but THE wall; and that is what I have done. As it grew, my enthusiasm outran my endurance. I placed hardpan and splashed cement until I had to lay off for two days. Even then, I crawled out and did obeisance to

the wall that was to be. It is so seldom that a creation fills up a dream, but that wall has done more. As the forerunner of many walls to come, in time it may bear a bronze plate, 'Anno Domini Robertus aedificat, 1925.' I don't feel in the least guilty for taking up so much space about my wall. It is nothing to the space it has occupied in my mind. I built it by hand by day and with my mind at night, when I could not sleep for fatigue. When I did sleep, I dreamed twice that I fell up against it and pushed it over. The first thing in the morning, I rushed out to tentatively test its stability. I pant to plant more walls. I want to get a monopoly on all the hardpan in the county and build a wall all over Rosecroft and then follow it around on Sunday mornings."

The above words signify that ADR was a landscape architect at heart. Those walls are still standing for us to study and walk around. With that in mind, would it surprise you to learn that there was a much-used billiard room in his home with shelved trophies that proved there were other goals he could attain with his skillful precision?

It was as a writer that Mr. R. truly hit the bull's-eye. As you have noted by now, his shafts found their marks even better, because they sped on ripples of laughter. However serious the article he was writing, he usually gave a hilarious twist to some part. No wonder that the members of families receiving CALIFORNIA GARDEN in those days fought to be first to read a new copy. We are lucky that we can still go back to those early issues that have solid information and fun for today.

Although ADR sought diligently to establish correct botanical information, he did not take himself too seriously. Here are more chuckles:

"I am laughing over being classed by an Eastern editor as too much of a scientist to write for the general public. Why, I have to keep a glossary of botanical terms on my desk to be able to understand his paper which is keyed way down to the kindergarten class. That brings me to the bulletin on Phillipine Species of Begonias, dissecting and presumably describing fifty-nine sorts. I say 'presumably describing' for among them is one named *Robinsoni* that another Robinson had the gall to discover or godfather in 1908. Being specially interested, of course, I have tried to translate the scientific language into one that means something to me. The margin of the bulletin, fortunately a generous one, is now filled with my equivalent of such words as suffrutescent, terete, etc., and I am beginning to have a sketchy idea of the begonia—but the story is still a foreign tongue.

"When L. H. Bailey visited Rosecroft on three occasions, I sweated internally and infernally for fear he might ask me the difference between petiole, peduncle and pedicel. Though I know it at this minute, I won't in half an hour, and I never did when he was here."

This photo of the author and Alfred D. Robinson was taken on one of her many visits to Rosecroft Gardens.

Because Rosecroft was visited by many famous horticulturists who all agreed that there was no display anywhere to equal that of its begonias, Mr. Robinson wrote, talked and dreamed of having a comparable exhibit in a lath house in Balboa Park. Here are some of his reasonings:

"Only a small percentage of our own people realize the wide diversity of the begonia family in both habit and color of bloom. A still smaller number would visualize it as needing a large, a very large, lath house for its proper exhibition. A mere handful know that, in a suitable lath house in Balboa Park, a begonia exhibit could be maintained that would be so admirable and unique that it would form a legitimate news item in every gardening paper in the world, because no other place in the world can have such an exhibition of begonias.

"I would justify this last supposition by stating that, with few exceptions, the begonia family does not belong in a greenhouse. It wants filtered sunlight and temperate weather with a fair degree of moisture, it dislikes heat almost more than cold. It cannot stand dry heat in particular and must have perfect ventilation. These conditions are to be had to perfection in San Diego. Frankly, this is a plea for a Balboa Park Lath House so that a real begonia garden may be another wonderful feature of that beauty spot."

In June, when the A. D. R. Begonia Branch met with Mr. George Kempland, Nursery-Landscape Supervisor of Balboa Park, it was proposed to plant a permanent collection of begonias there as a suitable memorial to Mr. Robinson. The supervisor felt that the eastern end of the lath structure is well suited to begonia culture, and he would be able to establish an exhibit worthy of the man it is to honor.

With its president, Mrs. Chester Lee, presiding, the Branch voted to proceed with plans for funding this display in time for its anniversary meeting on August eighth. Mrs. Thomas O'Reilly (463-6788) was appointed chairman of the project. She asked Mrs. Peter Lee (239-3196) and Mrs. Donald Birchell (466-7631) to assist her. Anyone interested in further information may call one of the above members. It is our hope to make this Robinson Begonia Garden in Balboa Park, like his wall, "a creation that fills up a dream."

TUBEROUS BEGONIAS

AUSTRALIAN BEGONIA FAIR

BALLARAT, one of Victoria's largest provincial cities, about seventy-five miles west of the state capital of Melbourne, was once a busy Australian gold mining town. Now it is better known for its parks and gardens.

About twenty per cent of Ballarat has been given over to reserves and recreation grounds, and its public gardens are the pride of the city—never more so than early in autumn when the begonias are in bloom. In years gone by tourists came to Ballarat from all parts of Victoria to see the begonia floral display. As the number of visitors grew each year, the Ballarat City Council decided in 1953 to stage an official begonia festival to attract even more tourists.

Since then it has become a popular annual event. The festival is held in early March, with parades, outdoor art shows, aquatic sports and open air stage productions.

Displays such as the one pictured above can be seen at the Southern California Exposition at Del Mar. This year the Expo runs from June 27–July 9.

SEEDLINGS & CULTURE

AVID BEGONIA ENTHUSIASTS will tell you: "The only thing more dazzling than one tuberous begonia is a score of them." If you have ever seen such a collection of color you know what they mean.

Having such a show in one's garden may be too much to hope for, but having several tuberous begonias to brighten the garden this summer is possible. Nurseries have to offer, now, inexpensive seedling tuberous begonias which were started in flats. They will bloom a little later than tubers started earlier in the season, and somewhat less profusely this first year, but the blooms are equally impressive—and delightful.

Nurseries offer these begonias in a variety of colors and forms, including the ruffled camellia and rose forms which headline the new hybrid types. The individual flowers are a study of perfection. To view these blossoms in masses is an unique experience.

In planting seedling begonias, choose a well-drained spot and insure a rich, porous soil. You can use organic material to achieve this (peat moss, leaf mold, etc.) or choose a recommended, ready-to-use, nurseryman's planter mix that incorporates the essential ingredients.

Many gardeners prefer growing begonias in clay pots and rely on them as a portable color display throughout summer and early fall. Six-inch or seven-inch pots should be used. A potting mix of peat, leaf mold and sand is a desirable planting medium.

The amount of shade you give begonias depends on the locality. In coastal gardens, part sun is best. Inland, a minimum of morning sun can be tolerated, but neither should begonias be planted in full shade.

While veteran gardeners may have individual ideas on feeding begonias, the plants do respond to plant food. Your nearby nursery has plant foods specially formulated to enhance the blooming capacity of such flowering plants as begonias. These may be applied every two or three weeks. A yellowish tinge to the foliage usually indicates a need for food; a bluish tinge is an indication of too much food.

FLOWER SHOW COMPETITION

A Sure Way to Excel in Arrangements

"CONVENTION COLOR" is the theme of the class in which this stunning arrangement of glads, anthuriums and aspidistra leaves won a tricolor. The exhibitor chose to avoid the red, white and blue. She made her "color" vivid rather than patriotic. Her red and yellow flowers repeat the gloss as well as the brilliant colors of the handmade container.

"BLACK AND WHITE" is the title of the class in which this arrangement won the coveted Award of Creativity. Bamboo was sprayed white and contrasted delightfully in form and texture with the exquisite coral and spray of phalaenopsis orchid. The black background gives drama. The design is simple and satisfying.

"PROTEAS PLUS" is the class title. However, this creation could have been entered in classes called "Open Spaces", "In the Round" or even "Sculpture with Scrap". It had to include something man-made, because this class was eligible for the new Nature, Art and Industry Award of the National Council of State Garden Clubs, Inc. The exhibitor fastened three metal circles from a discarded wall sconce to a narrow wooden strip which was impaled in a pinholder. Except for three strips of flax her only plant material consisted of three protea flowers with the self foliage which is leathery and blue-green Proteas are so distinctive they are usually best used without other flowers. The round container on its round base repeats the round form of the discarded metal—a fine example of repetition which is always a good device to improve design.

WELCOME THE CHANCE to enter flower arrangements in flower shows. Like everything else, our arrangements improve with practice, and we do our best when competing.

The schedule of a show creates a problem to solve, and we must show more ingenuity and better technique than those who compete with us, in order to win the class. One must read the schedule rules and class descriptions carefully to interpret the class well and to be able to choose a container and plant material of the correct size and color which will look well where the arrangement is to be placed.

The born artist has an undeniable advantage. Yet, we have all seen arrangers who are not particularly artistic win again and again. They have become adept at interpretation of the schedule, have adequate knowledge of mechanics and have learned to apply the principles of design. (The latter is most important of all.)

It is not really difficult to learn how to make arrangements which are orderly, well-balanced and well-proportioned to the area allotted. It is just a little harder to appreciate the value of simplicity—to use few kinds of plant material, few colors (and yet have a dominant color) and the fewest number of stems to produce the desired effect.

Arrangers who are not unusually endowed with artistic talent may not become innovators, but they enjoy arranging. Their arrangements are the backbone of most shows.

The true artists will create those rare arrangements which will highlight the show and inspire all of us to try harder.

Flower shows create one image a community has of its garden club so it behooves a member to help her club put its best foot forward by exhibiting. She will be well-rewarded, because flower show competition is a challenging and almost certain step toward arrangement stardom.——————Dorothy Marx

Top Honors Go To

ALL-AMERICA ROSE SELECTIONS 1973

Hybrid tea roses have captured the limelight in the All-America Rose Selections trials this year with three beautiful new varieties, ELECTRON, GYPSY and MEDALLION making a clean sweep of the 1973 awards.

In a bright range of colors — pink, scarlet and golden buff, the three winners will be featured in the 112 AARS accredited Public Rose Gardens scattered throughout the United States.

Plants of the three 1973 award winners will be offered for the first time this fall at leading nurseries, garden centers, and by the major mail order rose specialists. They will be labeled with the green and white oval AARS tags which distinguish them as All-America award winners. ELECTRON, GYPSY and MEDALLION will be featured rose varieties next spring by every nursery and mail order house in the United States and Canada.

ALL-AMERICA ROSE SELECTIONS ESTABLISHES NEW MISCELLANEOUS ROSE CLASSIFICATION

To the standard Hybrid Tea, Grandiflora, Floribunda and Climbing rose classifications under which new rose varieties are judged in the test gardens of AARS has been added a new "Miscellaneous" classification. This classification would include all new rose varieties such as shrub, ground cover, miniature, dwarf and all others that do not comfortably fit into the established classes.

In setting up this new Miscellaneous classification, AARS pointed out that its testing and award program for new roses is considered the finest in the world, but many of the new and outstanding modern roses do not fit into its established rose classifications, and thus have no opportunity to gain an AARS award, regardless of their quality and excellence. The addition of the Miscellaneous classification makes it possible for any rose, regardless of its nature, to win an award if found worthy.

Of primary importance in this class will be the function of the rose variety and how well it fulfills it.

ELECTRON

ELECTRON (Patent Applied For) Here is an Irish rose, winner of an AARS 1973 award and new to the American public, although it has already proved immensely popular in Europe under the name of Mullard Jubilee. To date ELECTRON has won nine awards in Great Britain, Holland, Spain, Belgium, Scandinavia, Germany and Austria

ELECTRON is a bright, rose-pink hybrid tea bearing great quantities of large, full, very fragrant roses. The long, pointed buds open to high-centered, well-formed blooms of exhibition quality and are produced on stems of medium length. When cut, the fragrant, open blossoms are long-lasting and hold their color well.

ELECTRON is a bushy grower, well covered with dark green foliage down to the ground and bearing many stems of bright pink blooms, delightful in all stages.

This winner is a hybrid from the skills of Sam McGredy IV of Portadown, Northern Ireland. Its parentage is Paddy McGredy x Prima Ballerina. The ancestry of these varieties brings into the background of ELECTRON the brilliance of Spartan, Crimson Glory and Poinsettia, the size of Peace, and fragrance directly from both immediate parents.

This award winner should prove to be a most decorative garden variety due to the shapliness of the plant and its ability to produce quantities of bloom of award winning quality throughout the flowering season.

Three Hybrid Tea Roses

GYPSY

MEDALLION

GYPSY (Patent Applied For) GYPSY, the fiery orange-red hybrid tea AARS winner for 1973 comes from a long line of famous ancestors whose outstanding qualities seem to have combined to create this intensely glowing variety. GYPSY is truly outstanding with long, sturdy branches holding aloft the large, five inch, fully double roses like orange-red torches.

The deep, almost black-red, shapely buds unfurl to high-centered exhibition type blooms, holding their color throughout the life of the blossoms and all the while giving off a light, spicy fragrance. Often the underside of the satiny petals is touched by a deep, dusky scarlet. These petals are large, heavy textured and firm, making the rose an excellent and lasting cut flower.

Typically hybrid tea, the husky bush grows with a vigor that provides an abundance of blooms for garden display, house and exhibition use. A mantle of leathery, rich green foliage covers the entire plant and adds to its rugged beauty.

The father of GYPSY is Comanche, a natural to convey to the offspring strong plant growth and the warmth of the orange tones. GYPSY's mother has a mixed parentage of Happiness, Chrysler Imperial and El Capitan.

All in all, GYPSY has an ancestry of six All-America winners who contributed outstanding characteristics to make her a winner and start her on a long garden career. This rose is the first hybrid tea in the red shades to win an AARS award since Mister Lincoln in 1965.

MEDALLION (Plant Patent No. 2997) A distinctive new winner having probably the largest blossoms of any variety ever to receive an AARS award. The huge, seven to eight inch blooms are formed by up to 35 broad petals of apricot pink. The shapely pointed buds, two to three inches long, are a soft shade of apricot buff, changing to a light apricot pink in cool fall weather. The delicate coloring of MEDALLION varies in intensity with the weather and season, but is always a pleasing, pastel shade with the blooms subtly scented with a mild, fruity fragrance.

The plant is very vigorous, reaching from four to six feet in height, depending upon the area in which it is grown. MEDALLION is erect, well-branched, and surprisingly, for a plant with such large blooms, produces an abundance of flowers almost always borne on single stems 12 to 18 inches long. As many as 45 roses have been counted on an individual plant at one time.

The light green, oval shaped foliage covers the plant and has good resistance to disease.

MEDALLION was the result of a cross made ten years ago by William Warriner, using as parents South Seas x Kings Ransom. No doubt the huge flower size was a direct inheritance from South Seas, although Kings Ransom, which must have contributed the golden undercolor, also has large flowers. Both parents have fragrant blooms..

PEPPERS HOT, PEPPERS SWEET

HARDLY A TABLE in America lacks its shaker or grinder of black pepper, which cooks have known as seasoning as far back as there were cook books. A tree or vine in the Oriental Tropics produces berries that are dried and ground into powder. The outer skin of the berry is black pepper, and when the pericarp is removed, there is a layer which is white pepper so much used to flavor soups, potatoes and fowl. This is of the *Piper nigrum* genus of the Piperacea family and entirely unrelated to our garden pepper of many varieties.

Our garden vegetable is a member of the nightshade family, Solanaceae, kin to tomatoes, potatoes, egg plant and petunias. The culture of all is similar. Most of them are in the genus *Capsicum frutescens* and are native to the tropical Americas. Thanca, the physician who sailed with Columbus, found the plants in the West Indies and tropical Americas and took them back to Spain. Soon they spread to all the Mediterranean countries and became staples in the diets of the North Africans, Turks, Greeks and Italians. Because of its hardiness, the hot pepper spread more rapidly and was used as a medicine before it was adopted as a seasoning. It acquired a widespread use for digestive disorders. The adventurous and courageous got to chopping a little of the hots on their meat (it destroyed all odor and taste of putrefaction). This seasoning became more common than the expensive spices that had to be imported. A poor man could raise the hot peppers which soon became his main condiment and seasoning. Our Mexican neighbors, who had peppers as native foods and still raise large commercial crops, maintain that they are the best regulator and conditioner of digestion yet devised.

The original hot peppers were mostly small and button-like, grew either pendulous or upright—singly or in clusters—and were the hardiest, as they still are. There were small sweet bell-shaped ones, heart-shaped pimentos and round cherry-shaped ones. Through hybridizing, each type has been improved. We now have a great variety of shapes and savors for our choice.

Botanists still think peppers were native only to the tropical Americas and their off shore islands. After their introduction into Europe, they spread to all temperate and tropical climates and became so common that many peoples consider them natives—especially in India. But, there is evidence that they were introduced there by the Portuguese traders. The terrible pungency that makes people perspire produces a cooling effect, a desired condition in the unrefrigerated Tropics.

A real pepper *aficionado* eats only the hot ones. He likes them both fresh and dried, served in a side dish, chopped with a knife and fork (he does not touch them for fear of rubbing his eyes), and lifting the particles with his knife, sprinkles them over the meat and beans and dives in. He snorts and blows, the sweat runs down his face. He mops his brow and continues with gusto, exclaiming with pride, "That is a good one!" (This is a picture of my husband, an *aficionado* of the first rank.)

The hotness is contained in the oil of both the flesh and seeds but more so in the seeds. This hotness irritates the flesh, excites body fluids and produces a burning sensation. Many people are so sensitive that they cannot touch hot peppers without burning and go into shock when they eat them.

My husband was most concerned at work one day, because a fellow worker picked up two very hot pea-sized peppers from his lunch box, popped them into his mouth, chomped down on them and FAINTED. The worker was taken to First Aid and later sent home as unable to work the rest of the day.

Usually the smaller the pepper, the hotter it is. The tiny, round dried ones sold in cellophane bags as chili tipines are hot, but there are hotter ones. I have a perennial one about eight years old and five feet tall which produces small pointed upright clusters; the individual pod is the size of a small bean. I call them "Hell Hots". I do not know the real name, because the seeds came from Guadalajara. They are evidently one of the cluster peppers, *Capsicum fasciculatum.* These are the ones that made the worker faint; even my husband never eats a whole one. One tree supplies my husband all he wants.

The common hot peppers for gardeners are usually red, slim to a point and listed as cayenne or tabasco. These are grown commercially mostly in Texas and Louisiana. The cayenne is long, slim and red; the tabasco is small, upright, orange-scarlet and very hot. Our bottled tabasco sauce comes from a large acreage on the southern tip of Louisiana, a natural climate for peppers: hot and humid with rich alluvial soil.

Paprika is a common pepper powder used as seasoning and garnish, mostly imported from Hungary—millions of pounds of it. It comes in many grades of pungency. It is basically a sweet pepper to which some hot is added to give it some pep. We grow a pepper called the Hungarian Wax which is up to eight inches long. It is hot and produces a fine flavored powder. This one is at first yellow then turns red. We see in our market a mildly hot one which is stubby and a

greenish-yellow, known as chili verde. Another mildly hot one with a distinctive flavor is the deep green jalapeno, grown extensively in Mexico and most often sold pickled in vinegar and oil and sometimes with anchovies. It needs hot weather and should not be planted until summer is here.

The average American does not take to hot peppers. The ones who do are a special breed. In the beginning, men get started in a spirit of bravado that they hope displays manliness. Who knows why women eat them? Yet, there are those who seem to relish the sensation. For both, they are addictive! Once a taste is acquired, food seems tasteless and bland without peppers—good, hot ones.

Peppers do have a distinctive flavor that no other food has, which is also in the so-called sweet peppers. They exist in the wild form, but are not so numerous or hardy as the hot ones. The sweets have undergone the most hybridization and have reached the greatest popularity. There are the lobed and globular bells, the heart-shaped pimentos, the round flat cherries and the long yellow bananas. Popular varieties are: California Wonder, Canape Hybrid, Yolo Wonder and Golden Calwonder. In my estimation, the thinner the shell, the crisper and tastier the fruit. The commercial varieties tend toward thick, juicy shells with more pronounced flavors. Burpee's Tasty Hybrid comes with a thinner flesh and more delicate flavor. Because peppers of the bell variety are common in markets and harvested green, we know them best in that condition. If allowed to ripen on the plant, they are not so crisp but more flavorful and sweet.

A heart-shaped, heavy walled sweet one is usually allowed to ripen into a deep red, is skinned, cooked and canned. It is known as pimento. Combined with cheese, eggs, potatoes or in casseroles of meat and vegetables it makes delectable dishes. It adds a most palatable flavor to sandwiches, too.

Another of the sweets is the long (to eight inches) Anaheim chili which Mexicans toast under or over a flame, skin and stuff with cheese or meat and present as chili rellenos. These chilis toasted, cooled under running water and skinned are delicious served with meat or made into sandwiches. They are the canned green chilis which we buy. The long, yellow banana pepper is thick fleshed and can be prepared and eaten the same as the Anaheim, but is sweeter.

All peppers are chilis to our Mexican neighbors. What we buy as powdered chili is sweet peppers with varying degrees of hot ones added to vary the flavor. Meat and beans with chili added is our restaurant dish popular with all classes, but a pinch of chili as the Mexicans use it will add flavor to almost any dish. Mexicans make their chili fresh daily by grinding a dried sweet pepper in a mortar; the flavor is a great improvement over the chili we buy in groceries. Strings of these dried chilis hang on porches and in kitchens in most Mexican homes. Great bins of them are for sale in Mexican markets, and occasionally in our super markets. They are used in sauces, mixed with chocolate for their moles, with eggs, beans and a pinch for good measure will help anything. This chili flavor, so subtle and delicious, has inspired thousands of Mexican restaurants to spring up in the last twenty years.

A few pepper plants in a garden are all a family needs. They are pretty, bushy, shiny-leaved plants whose fruits, first green or yellow, turn red and become most decorative. Their texture and flavor is best when first harvested. To be able to run out and bring in a crisp bell and slice into the salad will produce a treat any day.

DON'T plant sweet and hot peppers next to each other, because some pollination will take place and all will be at least mildly hot. (Ed. note: We all have different opinions about "mildly hot", but I have not tasted such a hybrid that was—in the least—MILD.)

Nurseries will have four to six varieties of plants, mostly sweet. The rarer and non-commercial ones will come from seed which are slow in germination (up to three weeks) and must have warm sunny days. With a spring such as we have had this year, cool and cloudy, then a few hot days, but always chilly nights, one will see plants just set there, fail to grow, and even turn yellow and die. Since peppers are all originally tropical plants, this is not surprising, and we have to judge by temperature when to plant or set out.

One of the sweets we seldom see in our markets except as pickles is the round, flat cherry. It is a real tropical and hard to grow near the Coast. It takes the heat of our inland valleys. The commercial crops come from south Texas and the Gulf States.

Peppers are seldom a great commercial crop, but small acreages abound in San Diego County, and we can always have a few in our gardens or in pots which we nurture in the cool weather.

Like cucumbers and celery, peppers have little food value. They give texture and variety of flavor to our salads, soups and other foods. They are over ninety per cent water. A medium-sized bell pepper will have only fifteen calories, but is high in vitamins, especially A and C. They have added much to the diets of the poor tropical peoples in the Latin Americas and India. Even one teaspoon of chili powder has thousands of International units of Vitamin A, so the taco is to be relished for health reasons (which is not why people eat it).

Peppers, hot and sweet, can always be with us. Enjoy them!

ROSALIE GARCIA

GUNTHER photos

ABOVE
Roman decor patio showing indoor/outdoor effects; exhibited by the San Diego Chapter of Calif. Ass'n. of Nurserymen.
ABOVE LEFT
Aechmea fasciata variegata (foreground); *Ananas bracteatus striatus* (background) located in hanging basket-foliage plants display.
LEFT
Cacti garden displayed by San Diego Cacuts & Succulent Society.
CENTER RIGHT
Rose garden in front of the general store depicts varieties SAN DIEGO and LOS ANGELES in foreground. Staged by San Diego Rose Society.
ABOVE RIGHT
No. 51 is BIG BOY, a rex-leaf in the display of the San Miguel Branch of the American Begonia Society.
LOWER RIGHT
Fancy leafed caladium with maiden hair ferns in hanging basket.

EXPO 1972

BY ATTENDING the 1972 Southern California Fair and Exposition, you can have an afternoon away from home gardening chores and appreciate the toils of others. The photos on these pages give some indication of what is waiting to tantalize visitors.

FREE FORM-

BARBARA JONES

FREE FORM—ABSTRACT are two words used in connection with artistic design in flower arranging which baffle most arrangers.

My twenty-five pound 1970 Webster's Dictionary defines free form as "having an irregular, usually curvilinear form or outline.....spontaneous, unrestrained, etc." The National Council of State Garden Clubs, Handbook for Flower Shows definition is: "A form which does not conform to a specific geometric pattern. Based on curved lines. Non-geometric." Abstract is defined by Webster as "characterized by design or form that is geometric or otherwise not representational." The word comes from the Latin *abs*, from, and *trahere*, to draw. The Handbook defines it as "A type of art derived from realism but stripped of most or all details, leaving only basic essentials through the use of lines, shapes, colors and textures." Well, I still would not know how to make either one.

Barbara Jones has her degree in Botany, is a teacher in the Ohara School of Ikebana, and is studying to be a flower show judge.

At the 1972 California Garden Club Symposium the principal speaker on flower arrangement was Mrs. James A. McBain of Mountain Lakes, New Jersey. Mrs. McBain is the Chairman of Flower Show Schools for the United States for the National Council of State Garden Clubs, Inc., plus being so well known in other fields as to be listed in Who's Who of American Women. In her lecture, not only did she explain the difference between free form and abstract, but she did flower arrangements which really showed the difference. These arrangements were not done to be outstanding examples of floral art, but as simple examples of these two floral art forms which are so confusing to many arrangers.

So, follow me through Gladys McBain's reasoning and explanations, and you will better understand the differences, too. (Her exact words are in quotation marks; the rest are from my notes.)

A free form arrangement is not bounded by geometric forms. Think of an ink blot. (Take a piece of white paper, put a drop of dark ink on it, press another piece of paper on top of the drop. Presto,

-ABSTRACT

TALLY photos

an ink blot.) One of the best examples of a free form flower in nature is the antherium. Look at the picture of the free form arrangement. When the audience was asked what the center suggested, there were at least twenty-five different items suggested. This arrangement was done with a piece of driftwood painted a light aqua-bluish on the front and crimson on the back, a pine branch, seven red antheriums and five aspidistra leaves rolled to distort the natural shape.

There are biomorphic free form arrangements in which the shape suggests a plant or animal form, not a geometric shape. These are called visceral forms. A bean seed or kidney is a good example.

Words which best describe free form are amorphus (nothing), curvilinear, asymmetrical.

Abstraction in flower art is the "stripping down" to the essentials. The minute one cuts a flower, abstraction has begun. An abstract arrangement may have a geometric form. One of the most abstract plant forms is the cat-tail.

Gladys McBain next explained abstract expressionalism. She light-heartedly told this delightful tale as she assembled the abstract arrangement shown in the picture. "My hand is very painful." She placed five pieces of wood in an oasis filled container. (Oasis is a solid form used as a holder. The wood was stripped of bark. It was from an unknown Caribbean Island plant.) "I went to the Doctor and told him how much it hurt." She put the tall magenta gladiolus into the container. "The doctor said, 'Take an aspirin'." And, she put in the large white spider chrysanthemum. She explained that the idea that one tries to show in an arrangement is personal and may not be seen by others in the same way. Expression is a personal thing. When one is asked to interpret an idea, the arrangement should give the arranger's feelings and not be an actual depiction of the idea.

Another point that she emphasized was that it was not the container that made the style. "Often arrangers feel that they must have special containers to do free form or abstract arrangements, but that is not so." She went on to prove her statement by doing a free form arrangement in an exquisite, delicate, antique, French urn and an abstract arrangement in an antique gold colored Greek column container.

In finishing, she said, "In flower arranging it is not what you have, it is what you do with it. And, remember, let's put plants and flowers back in our flower shows!"

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MALLOWS.

Bush to Marsh

GALLOWAY, photo

PLANT FAMILIES ARE like people families in having family resemblances. In the mallow family some of the resemblances are: leaves alternate, never opposite or whorled, and palmately veined (all main veins originating from a single point, the point of attachment to the leafstalk); flowers regular, five-petaled. That is all pretty dull stuff, but what else they have is monadelphous stamens. Now that is something! This stamen arrangement is not exclusive to this particular family, but this family goes all out for it. These plants have large numbers of stamens, all united into a tube or column with the anthers facing outward. Think how the flower of a Hibiscus looks, or study the little bush mallow in the photograph.

Noting such structures as this, which run through a family, is a step toward identification of a plant you are meeting for the first time. The problem is, you have to remember, "Now which family is that with the monadelphous stamens, hm'm?"

As with all families, some members are more useful, or more beautiful, or better adjusted to surviving under adverse conditions. This last phrase points toward that malva weed we continually fight in our gardens and fields. This weed has roundish leaves on long petioles; the root is so tough you can not cut it with a hoe and so long that you can't pull the plant out of the ground. That plant is eminently suited to survival, or it would not have survived in Eurasia and then immigrated to America where it goes right on surviving. Do you all know about "cheeses"?*

There are some eighty-five genera in the mallow family, about 1,000 species. The family provides no great staple foods, but neither are any of its members poisonous. I like the way Asa Gray said it, "...an innocent family". After all, the mucilaginous root of one member of the family is used in the manufacture of marshmallows. Can you think of anything more innocent than marshmallows?

Various mallows are used in medicine, perfumery, and shoe blacking; a few are groceries—okra is the best known of these. By far the most valuable and

*See next issue

Bush Mallow, *Malacothamnus fasciculatus*:

Flowers are about an inch wide, pink with golden brown stamens and are crowded into clusters on wand-like stems. Stems, leaves and calyces are covered with stellate hairs; you may wonder how hairs can be star-shaped, but they can, and these are.

useful, are the cottons and other fiber plants. Cotton (*Gossypium*) has been woven into cloth in India at least as far back as 1800 B. C. It was seen by Columbus in the West Indies when he explored the area, and it was grown in Mexico and Peru centuries before any Europeans settled there.

Most of us are not growing any cotton patches, but we probably have some mallows of one kind or another. Flowering Maple, Hibiscus, hollyhock, Rose of Sharon, Pavonia, Turk's Cap and that pestiferous weed all belong to this family. Native to southern California are the Desert Five-Spot, Apricot Mallow, Wild Hollyhock, bush mallow and the shrubby tree mallow, or Malva Rosa.

This last one, a rounded shrub to fifteen or more feet high, was cultivated in very early days around the missions. It has white bark, light green maple-like leaves, and rose-pink flowers with deep red veins. Botanically it is *Lavatera assurgentiflora*, but its common name is Chicken Yard Fence Plant. In the early days, not every farmstead had running water, or even water to spare, for such fancy things as pink flowering bushes, but nearly everyone had a chicken yard. These plants would grow without any water other than what fell from the clouds, so what better plant could be found to shade the chickens?

I can still see white leghorns dusting themselves under the Chicken Yard Fence Plant on Sunset Ranch, Grandfather's homestead—now a part of the Ecke poinsettia plantation.——— HELEN WITHAM

THE BOOK SHELF

Reviewed by THERESA KARAS YIANILOS

COMMON WEEDS OF THE UNITED STATES prepared by the Agricultural Research Service of the U. S. Dept. of Agriculture, Dover, 1971, 463 pp., 225 illustrations. This is the kind of book you may carry in the car if you want to identify one of the plants that you see most often and find everywhere—those classified as weeds. This volume, prepared in 1970, is a most useful non-technical identification guide and source of information on weeds of the continental United States. You will be able to identify almost any common weed you are likely to encounter. Both scientific and common names are given of more than 220 important species with clear accurate drawings of the plant in habit, flower, fruit, seeds, capsules, etc. with full descriptive text that includes botanical notice, habitat, area, peculiarities, origin, importance, etc. including a map in showing distribution throughout the U. S. An important book and aid for the nature lover,collector,farmer hobbyist, botanist, gardener and livestock owner. A must if you are a backpacker.

THE VEGETATION OF THE NEW JERSEY PINE-BARRENS by John W. Harshberger, Dover, 1972, 284 illustrations, 329 pp.
Over 280 photographs and drawings, including some historical sidelights and items of folklore are part of this fascinating book. This book holds absorbing interest about an area that reminds one of our Torrey Pines region. The ecology of the barrens (an early Colonial designation referring to a comparatively thin farming soil) which are not barren at all, has not changed essentially since Miocene times due to geographical isolation. An interesting book to anyone curious about nature and man in a remarkable area.

BULBS A Time Life Encyclopedia Of Gardening by James Underwood Crockett and the editors of Time-Life, 1972, 160 pp.
Part of a series of books on gardening, this latest edition of bulbs does credit to the erudite consultants who worked to make it complete. The photographs as always are breathtaking and the copy is short but concise and to the point. The historical background adds great interest and makes good reading for many old, familiar floral friends. A zoning map is of great aid to Californians, but since we can grow many bulbs all year round the book is a must to own.

PERENNIALS by James Underwood Crockett and the editors of Time-Life, 1972, 160 pp.
In the plant world, being dependable, undemanding, attractive and adaptable can sometimes be a drawback. Gardeners spend most of their time mollycoddling temperamental growers while such reliable plants as irises, daylilies , primroses, and chrysanthemums may be taken for granted. In PERENNIALS the author focuses on the virtues and rewards of this class of plants. Full-color photographs of perennial beds and borders—as well as of individual plants—illustrate the merits of perennials. These are accompanied by diagrams keyed to show the massing of plants in the photographs. One series of pictures shows the variations in the same border in spring, early summer, midsummer and autumn bloom.

An unusual purple spider-type daylily named AABACHEE represents a 20-year hybridizing effort by Raymond Cheetham of Kent, Ohio. Photograph by courtesy of TIME-LIFE books.

THE COMPLETE BOOK OF GARDEN BULBS by Marc Reynolds and Wm. L. Meachem, Funk & Wagnalls, 1972, 366 pp.
Beginners as well as more experienced gardeners will find this informative book a delight to read. Divided into two major parts that cover spring and summer bulbs, the book addresses itself to such matters as which bulbs are suitable in cold climates, which in warm; how to grow an indoor garden, using bulb flowers in arrangements, caring for potted holiday bulbs, with individual chapters devoted to the most popular. A good book to own especially if you have a piece of property in Julian; there you can even grow the early bulbs.

AN ILLUSTRATED FLORA OF THE NORTHERN UNITED STATES AND CANADA by Hon. Addison Brown & Nathaniel Lord Britton, Dover, 1972, in three volumes Paperbound 2052 pp.
Whether this monumental classic of botany on the flora of the Northeastern United States and adjacent parts of Canada is used as a student manual or as a ready means of comparison and identification of the plants, some of which grow around us in California, this work is worth collecting and having in your botanical library. At one time, rare and expensive, it is now available in paperback with an easily followed text and fine illustrations, covering 4666 species, each identified by its popular names and by Latin nomenclature. The line drawings are exceptionally fine.

HALF PAST A CENTURY

IT WAS 1922 and the editor of CALIFORNIA GARDEN magazine, as well as the president of San Diego Floral Association, was again Alfred D. Robinson. He handled the magazine from his office at Rosecroft in Point Loma.

Printed in very tiny type, CALIFORNIA GARDEN'S dozen pages were as spirited as they were informative. The magazine sold for ten cents a copy and was published monthly. A subscription for one year cost one dollar.

San Diego Consolidated Gas & Electric Company advertised a circulating type gas heater that would give you piping hot water right to your faucets, thus relieving you of carrying about a teakettle. Readers were cautioned: "Money Talks! Don't let it say 'Goodbye'! Buy W. S. S. (War Savings Stamps)."

Miss K. O. Sessions advertised fuchsias and begonias in three inch and four inch pots for fifteen and twenty-five cents. Miss Rainford's Flower Shop was located at 1115 Fourth Street instead of 3334 Fifth, but her ads used the same cut as today's, that of two longhaired boys in high-heeled buckled shoes flanking an urn of flowers.

Half a century ago Mr. Robinson wrote: "We suffer physically from an age of cement pavement, concrete buildings and autos..... It is a common prescription, 'Go up in the mountains or back into the land'." Yet the school children held picnics at the head of Mission Gorge, where they camped over night and wrote about the wildflowers for the Boys' and Girls' page of the magazine.

The Garden spoke of the hills of San Diego being aflame with the red species of the Mimulus tribe, "Monkey Flowers." On the other hand we read: "The Garden (CALIFORNIA GARDEN) is anxious to preserve records of the little San Diego that straggled around the Bay. It knows that in many memories are still vivid pictures of canyons now filled, hills levelled and trees that are gone."

In 1922, Holland blossoms were being sent by aeroplane to the English florists. The Forest Service sent word that the yucca, or Spanish Bayonet, had been declared under protection, and its destruction would be a violation of the law, punishable by a $1,000 fine, a year in prison, or both.

Coronado Floral Association was formed in June 1922 as a direct result of their very successful flower show in the previous May. It burst forth with 150 members, sparked by the "heroic exertions" of Harold Taylor, owner of the exclusive flower shop in Hotel del Coronado.

John Morely was superintendent of Balboa Park, a director of the Association and a frequent contributor to the magazine. For the August 1922 issue, he advised sowing seeds for winter and spring flowers. Some of the varieties he recommended have not been improved upon yet--Little Gem, alyssum and Mrs. J. Bradshaw, geum.

He also suggested planting seeds of California poppies, Nemesia, Schizanthus or Butterfly Flower, columbine, cineraria, perennial candytuft and nasturtiums.

Mr. Morely called attention to the beauty of the display of lotus in the pond beneath Cabrillo Bridge, long since gone.

It was interesting to note that Mary A. Greer, vice-president of the Association, was appointed to represent Floral with a position on the Balboa Park Auditorium Board. What a lovely relationship between organizations existed in bygone days.

San Diegans took their flowers seriously fifty years ago. In May 1922 over 4,000 attended the Spring Flower Show.....there were about 100 present for the April meeting held in the Wangenheims' garden.....the San Diego UNION was thanked for its support.....

In planning for the Fall Flower Show the editor wrote: "The dates have been set for September 30 and October 1. The bold seven who direct the affairs of the Association always hate this job, knowing that they are but seven and fully 700 will be sure they could have done it better should the weather prove unkind. Think back over the unbroken record of shows twice a year for sixteen years in all kinds of times. The city now believes it always had and always will have two flower shows a year."

NIBBY KLINEFELTER

MEN INVADE FLOWER SHOW

BESSIE F. COLLINS

THE USUAL, polite sounds of appreciation heard at most flower shows were punctuated by laughter in appreciation of entries in the men's booth at the recent show held in Coronado, California. Coronado, the paradise for retired Naval officers and their families, was the scene of a flower show that attracted many flower enthusiasts, on a lovely April afternoon.

Two features, a special area set aside for entries by children and the small booth reserved for men's entries, added a touch of salt to the floral feast set out in a park-like section of the city.

In the men's booth one exhibit showed a flower drooping and a sign reading: "I can't believe it ate the whole thing." Another showed a small metal sculpture of an armored knight, holding a flower between mailed fists—title: "When Knighthood Was In Flower." Still another showed ingenuity when a flower pot was not available; the planting was done in a man's old leather shoe. Adam and Eve, each clothed with a single fig leaf, were separated by an apple that was one bite away from its original form.

Whether the humorous exhibit was planned or spontaneous is unknown to the writer, but it showed that a salubrious environment can bring out creative effort.

In times like these, when laughter is all too rare, the chuckles, guffaws and other manifestations of enjoyment that came from the men's arrangements were in themselves worth the admission price.

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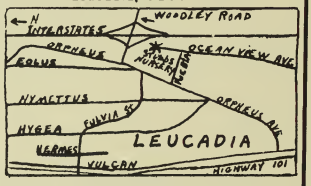

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TOPPING-OUT DAHLIAS

LARRY SISK

ONE OF THE MOST important cultural procedures to obtain good dahlia blossoms in plentiful supply is the topping-out of young plants. The procedure also is called stopping, or pinching-out, and is accomplished by removing the growing tip above the top pair of leaves. The tip is cut out, pinched or nipped—preferably nipped by a quick twist of fingers and wrist.

This topping-out restricts the upward growth of the plant and causes it to bush out with canes (laterals or branches) developing at leaf nodes. It also causes the plant to divert its growing energy from foliage to roots, hopefully forcing the plant to develop a bulky and healthy root system. Dahlias are heavy feeders and require a good root system to take in sufficient nourishment, and to develop into planting stock for another year.

Normally, the topping-out should be performed a month after planting. By then the eye on the planted root should have developed into a shoot to emerge from the soil and develop into a plant of three or more sets of small leaves. The greater the number of leaves on the small plant, the greater the number of canes to develop on which the flowers will appear later.

Here is where specialized techniques come into play for hobby growers. They will want as many

blooms as possible on the small varieties—miniatures and pompons. On larger varieties they will want to restrict each plant to the number of canes to produce maximum quality per variety. Thus, to obtain the largest blooms on the large varieties, the number of canes will be reduced to three, four, or five—according to experience noted by the grower in past seasons. Then, graduating downward according to size classification, the mediums with six to eight inch blossoms usually will be restricted to six (preferably) to eight canes, and the florist size with blooms of four to six inches, seven to nine canes.

To obtain a large number of small blooms, four inches and under, the grower may wish to top out each plant to leave three or four sets of leaves, and then to top-out each cane as it develops; this forces more canes at each leaf node on the topped laterals. It is not unusual for experienced dahlia exhibitors to pinch back the small varieties three or more times.

In restricting dahlia plants to the desired number of blooms, it is necessary to remove canes, as needed, by alternating. This is the taking out of a low cane on one side of the plant and then going to the higher one next above on the other side, etc.

It should be noted that each cane may also produce small laterals at each leaf node. In restricting the plant, these should be removed as they develop, leaving one cane at the base of each lateral to develop for later blooms.

Topping-out, restricting and controling each plant according to a desired pattern may be more of a chore to the average gardener who just wants flowers, and lots of them. If so, satisfactory results will be obtained by topping-out each plant once or twice. The experienced grower and exhibitor, however, uses the topping-out procedure as part of a science to make each plant produce blooms at specific times as well as of maximum quality. Various growers follow various techniques in "timing". but the end result hopefully is the same: maximum quality blooms on designated plants on given dates.

The average medium-sized dahlia will be ready for topping about thirty days after planting and will produce its first bloom sixty days after topping. Thus, to have blooms for a given show on a given date, the grower will count back from the show date—plant ninety days ahead, top-out sixty days ahead.

This formula works only on "average" mediums, with a big IF. Growing conditions must be "average"—soil temperature, moisture, protection from insects, etc. Also, the formula will vary from variety to variety, to be learned through experience.

The formula also will differ for the smaller varieties and the largest. For the smaller, blooms follow topping-out by about forty-five days, and for the largest, sixty-five to seventy-five. To make the formula work it is advisable to keep books on each variety to learn its blooming habits for guiding in subsequent seasons.

As a part of timing and to be sure of blooms, it is advisable to grow three or more plants of each variety and to top-out each plant on a rotation schedule—one plant of each variety every four or five days to cover both sides of the show date. In timing a limited number of plants in a small garden, the formula calls for early planting and early topping-out to make each plant produce canes much earlier. These early canes then are topped-out alternatingly, first one and then another every few days. The uppermost canes will produce blooms first, so these should be the first pinched back, moving down the plant from side to side, hoping to have canes appear successively on each plant.

Three tiny buds will appear on the tip of each maturing cane, small varieties as well as large. The two outside buds should be removed as soon as they are large enough to be rubbed out carefully. The buds usually appear, about the size of a pea, thirty days ahead of blooming, providing another gauge on timing. If the plant growth appears to be too early, the grower might wish to remove the center bud and keep one of the side buds to mature into a flower. Normally the side bud will blossom about a week later than the center one. Stems on the side buds may be longer; permitting them to grow may be desirable on some varieties just for the stem benefit.

Another way to delay blooming is to shade the plant as soon as the bud shows color. However, too much shade may affect exhibition color quality.

Conversely, blooming may be hurried by watering the plant heavily about the time it shows color.

While trying the science of timing, the grower should remember that other care of the garden is necessary in the meantime: lightly cultivating around each plant until the first buds appear, watering deeply on a regular schedule, spraying regularly to prevent insects and feeding about every three or four weeks with a fertilizer low in nitrogen content.

THE IRIS IN NATURE

ROY DAVIDSON

THERE IS ALMOST NO PART of the Northern Hemisphere that does not have among its native plants some species of the genus Iris. Of course, they are not found in locations too dry for everything except cacti, nor do they tolerate the deep freezing and short season of the tundra. Irises are to be found in nearly every country between these two extremes. The United States has native irises in almost every continental state including Alaska.

In San Diego County, the genus is represented by the species *Iris missouriensis*, which grows wild along the southern banks of Lake Cuyamaca.

Irises have been beloved as flowers since earliest recorded civilizations. Paintings, engravings, frescoes, tapestries and other art forms left by the peoples of many ancient cultures, from those of India, China, Japan, Persia, Egypt, Greece and Rome have depicted many versions of the iris flower. Many of the iris species were among those first plants to be accorded names in the first attempts at systematic botanic classification. There are so many kinds of irises, and they vary so much among themselves, that there will probably always be controversy as to their numbers, their ranks and relationships. "New" species are brought to our attention periodically, most of which are later considered but minor variants of an already well known species.

The earliest known record of man's association with irises appears to be about 1500 B. C. in the bas-relief of a Syrian iris species in the tomb of the Egyptian pharoah, Thotmes III. Irises were among the plants grown in the hanging gardens of Babylon. In China and Japan, there is record of *Iris tectorum* having been in cultivation for almost as long. The "lilies of the field" whose blossoms were said to be more splendid than kingly robes must certainly have been an allusion to the "onco" irises which grew, and still do, in biblical lands. There they are still regarded with some awe of their magnificence and some confusion as their rightful relationships. According to Plutarch, the word "iris" means "Eye of Heaven" and so was given as a name for both the rainbow and the pupil of the eye. In Korea, the iris is known as "Servant of the Rainbow." How it came to that honor is a charming tale about flowers which sprang up during a drought, following a ceremonial prayer for rain. The purple was chosen most beautiful, and as she demurely acknowledged—rain came and the rainbow touched the chosen beauty.

The acient Mohammedans carried the white *Iris albertii* throughout their empire to adorn the graves of their dead. Thus, it is found today in many areas not natural to its origin. Other irises also have had funereal associations. Bearded irises have come to be almost traditional cemetery plants in America because of their ability to flourish on neglect.

The yellow water iris, fleur-de-lis (*Iris pseudacorus*) has been carried from its original homelands of southern Europe to gardens throughout the world. From those gardens, it has escaped into wet meadowlands and ditches where it has naturalized. Many other species are now established in foreign locations, having first been grown for ornaments by man.

What could be more sincere and genuine praise for a plant than to have said of it that it is: "Noted for its great beauty?" Almost without exception, the flowers of irises are so regarded and as such are sought as garden subjects. Mother Nature was sly in giving some plants such attributes that they are able to succeed best in the competition of life by enhancing man's surroundings. However, certain irises do have other uses, probably the foremost of which is the cosmetic and pharmaceutical utility of the rhizomes.

Orris, ground iris rhizomes, is one of the best tooth whiteners known, and many generations of Italians have cut their teeth on dried rhizomes. In Japan, the very white face powder of the Geisha is made from the rhizome of the roof-iris, *Iris tectorum* Pulverized rhizomes are also used as shampoo. One Korean beauty tip for ladies: "If you wash your hair in iris water in June, it will grow very long."

Turner's NEW HERBALL (1551-62) tells that broth of the iris "sodden with wine, fasteneth loose teeth if

Roy Davidson is Chairman of the Species Committee of the American Iris Society. He conducted native tours of Oregon in May 1972.

Blossoms for the garden — rhizomes for the medicine cabinet.

the mouth be washed therewith" that it "provoketh sleepe" and that it "bringeth out teares." Also that it is good for "gnawings in the belly and for them that hath taken a thorowe cold." It is presumed that the root is to be sodden with wine in all cases!

Gerarde's HERBAL (1597) praised the iris even further as a *materia medica*. He advised it as a cure for dropsy; also as a "loche", licking medicine, to cure a shortness of breath, an old cough and all other infirmities of the chest. He says that it is equally good as a poultice for bruises, and specified that iris "layde to with white hellebor and an equal portion of hony, will scour out freckles, spottes and such alther foulenes of the face that come on by son burninge."

"THERE BE MANY KINDS OF IRIS OR FLOUER-DE-LUCE, WHEREOF SOME ARE TALL AND GREAT AND SOME LITTLE, SMALL AND LOW; SOME HAVE ONE COLOR, SOME HAVE MANY COLORS MIXED. VERTUES ATTRIBUTED TO SOME, OTHERS NOT REMEMBERED. SOME HAVE TUBEROUS OR KNOBBIE ROOTES, OTHERS BULBUS OR ONION ROOTES; SOME HAVE LEAVES LIKE FLAGS, OTHERS LIKE GRASS OR RUSHES."

John Gerarde (1597)

SEX LIFE OF THE FERN

Helen Witham

The birds and the bees and the flowers! But ferns have no flowers and they produce no seeds, so where do the birds and the bees come in? The answer is, they don't, not into the life cycle of a fern. Among the higher plants there are two somewhat different systems of reproduction—one for the ferns and their allies, another for the seed plants. Seed plants reproduce by seeds, and ferns reproduce by spores. (If you've studied botany, you may remember that pollen grains also are spores, but pollen grains function differently from fern spores).

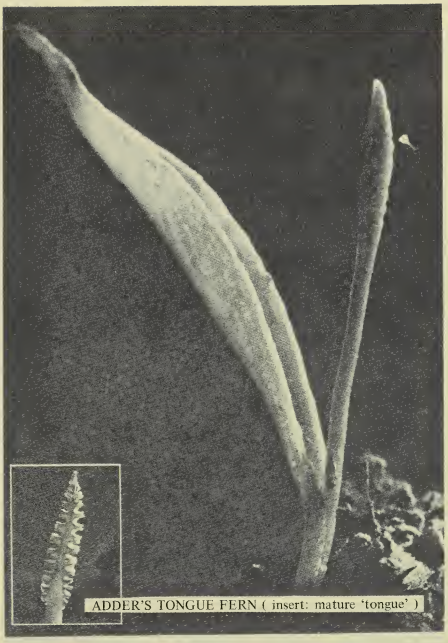
A seed contains a tiny plant all ready to grow and a food supply to get it started, and it grows into an adult like the parent. While a fern spore does not contain a tiny plant, it is able to grow into one; but, surprisingly, the plant it grows into is quite different from the parent. It is a low, simple, often heart-shaped plant called a *prothallus;* and you wouldn't suspect that it has any connection with the adult fern that produced the spores. The prothallus reproduces not by spores but sexually, by eggs and sperm, more or less like a higher animal. Its offspring is the spore-bearing adult fern, the plant we are talking about when we say "fern." Thus there is an *alternation of generations*—an alternation of a conspicuous spore-bearing plant which we ordinarily think of as the fern, and an inconspicuous sexual plant which most people never notice or know anything about, but which also is a fern in one stage of development.

All the higher plants and most of the lower ones have an alternation of generations; so their life history is quite different from the familiar one of the higher animals, like us. Before the invention of the microscope, no one understood this roundabout way of reproduction. Is it any wonder that tales about magic invisible seeds were invented?

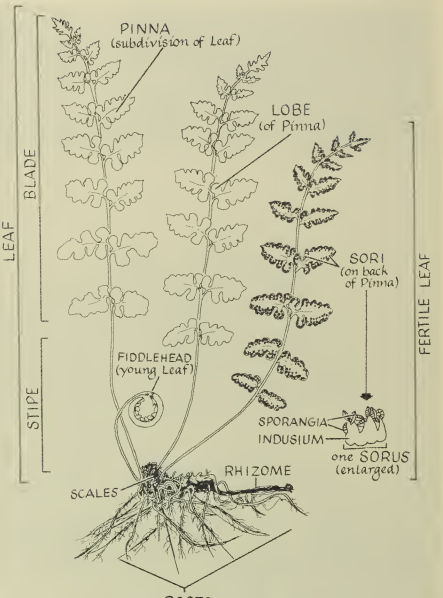
Where and when can you see any of these minute intermediate fern plants, the prothalli? They are short-lived, some extremely so—the prothalli of Pilularia may develop from the spore stage to sexual maturity in just 24 hours. They are small and inconspicuous (a pinpoint or a quarter-inch spot of green), and found only on damp ground. In a dry country like ours, the time would be the rainy season. Look for the newest, tiniest possible plant that is unmistakably a fern. It will be growing out of a prothallus, which by this time will be withering away. Search carefully nearby and you may find other even younger prothalli that have not yet borne any offspring.

If you have ferns in a greenhouse or in pots, you may see a mosslike growth on the soil surface, or even on the pot itself if it is kept moist. This green may be not moss at all, but sprouting prothalli!

The paragraphs on this page, and the illustrations on the adjacent page, are reprinted, with permission, from the new book "FERNS OF SAN DIEGO COUNTY", by Helen Witham. These extracts demonstrate that the book is "fun reading" rather than scientifically technical. It is a paperback, appropriate for taking along on backcountry outings; it will bring added pleasure to those outings by providing identification and interesting information about every fern you find. The book is a new publication of the San Diego Natural History Museum, in Balboa Park, and it now is on sale in the front lobby of that museum at $2 per copy. It has 74 pages of text, including many very excellent photographs and line drawings. Most highly recommended.

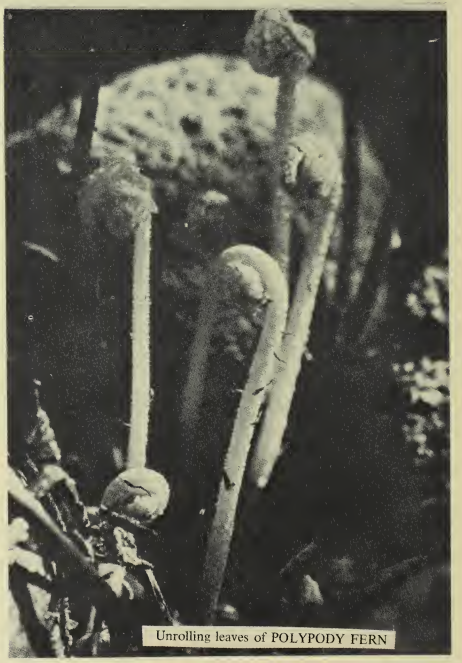


ADDER'S TONGUE FERN (insert: mature 'tongue')



BRITTLE FERN, showing parts of a typical fern

HARTFORD FERN



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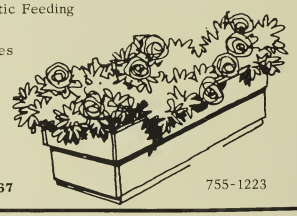

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